

REMARKS

In accordance with the foregoing, claim 1 is amended. New claim 12 is added. No new matter is added. Claims 2 and 11 are cancelled without prejudice. Claims 1, 3-5, and 12 are pending and under consideration.

CLAIM REJECTIONS UNDER 35 USC § 102:

Claim 11 is rejected under 35 USC 102(a) as being anticipated by Applicants' Admitted Prior Art (AAPA). Claim 11 is cancelled herewith which renders the rejection moot.

CLAIM REJECTIONS UNDER 35 USC § 103:

Claims 1-5 were rejected under 35 USC 103(a) as being unpatentable over (AAPA) in view of U.S. Patent No. 2004/0042553 to Elbaz et al. (hereinafter "Elbaz").

Independent claim 1 is amended herewith to specify that "when the transcoding is performed, the first data path and the second data path are set from an OFF state to an ON state so that the video data output from the decoder is stored in the video input memory using the first data path and delivered to the encoder after passing through the video input memory only, and the audio data output from the decoder is stored in the audio input memory using the second data path and delivered directly to the encoder after passing through the audio input memory only." In view of the amendment to independent claim 1, claim 2 is cancelled.

I. Applicants respectfully submit that AAPA and Elbaz alone or in combination fail to render obvious the above-reproduced added feature.

The Office Action superficially asserts that AAPA in FIG. 1 discloses substantially the same data encoding/decoding apparatus as recited in claim 1. Applicants respectfully direct the Examiner's attention to the differences between FIG. 1 of the specification, which represents a conventional data encoding/decoding apparatus according to the "Prior Art," and FIG. 3 of the specification which is a non-limiting embodiment of the data encoding/decoding apparatus recited in claim 1.

1. The conventional apparatus in FIG. 1 does not include the data path 17 from the decoder 16 **directly** to the video input memory 3, and the data path 18 from the decoder 16 **directly** to the audio input memory 5 in FIG. 3.
2. The conventional apparatus in FIG. 1 includes link 25 from the video output interface 12 to the video input interface 2 and link 27 from the audio output interface 12 to the

audio input interface 4. There are no such links in the apparatus represented in FIG. 3.

3. Further, the conventional apparatus in FIG. 1 includes the phase adjusting unit 7 which is not present (because it is not necessary) in the apparatus in FIG. 3.

In view of the differences (1) and (2) identified above, AAPA (i.e., FIG. 1) does not anticipate at least “a first data path provided to connect the decoder directly to the video input memory, when the coded stream of the first format is transcoded to generate a second stream formed in a second format” and “a second data path provided to connect the decoder directly to the audio input memory, when the transcoding is performed” as recited in claim 1.

The outstanding Office Action submits that AAPA does not disclose the decoder directly connected to the input memories as specified in claim 1, but relies on Elbaz to provide the missing teachings.

Elbaz describes a method and system for reducing delay in video communication, including, for example, video transcoding and continuous presence in a multipoint multimedia conference. In Elbaz's system illustrated in FIG. 1, a compressed video stream from an end user terminal placed onto the backplane bus 140 accumulates in an input buffer 125 before being provided to a decoder 120. See paragraph [0014] of Elbaz. The decoder 120 converts the compressed video stream into uncompressed frames, and the uncompressed frames are placed into input triple frame memory 123. The input triple frame memory 123 consists of three frame buffers: one buffer for the frame constructed by the decoder 120, the second buffer for transmission over the video bus 150, and an additional buffer to prevent stalling of the decoder 120. Nothing has been found in Elbaz that teaches or suggests the decoder being directly connected to the input memory in an apparatus having a structure similar to the apparatus of claim 1. In FIG. 1 of Elbaz decoder 120 is connected only to the triple memory 123, while encoder 110 receives data only from the triple memory 115. Moreover the data flow indicated in FIG. 1 of Elbaz does not suggest any direct connection of the output of the decoder 120 to a memory that is used to input data in the encoder 110. Similarly, in FIG. 3 of Elbaz, data output from the chunk decoder 221 of the input module 220 is not shown to be directly connected to input of the chunk encoder 241 in the output module 240.

II. The cited prior art reference fails to render obvious “a first data path provided to connect the decoder directly to the video input memory, when the coded stream of the first format is transcoded to generate a second stream formed in a second format” and “a second data path provided to connect to connect the decoder directly to the audio input memory, when the transcoding is performed” as recited in claim 1.

The Office Action asserts that "it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of AAPA and Elbaz et al before him/her, to exploit the well known transcoding set up as taught by Elbaz et al in the data encoding/decoding apparatus of AAPA in order to reduce delays resulting from video transcoding and continuous presence and provide an improved real-time performance in processing video streams" (see page 5 of the outstanding Office Action, second paragraph). In *KSR Corp. v. Teleflex Inc.* (2007), the Supreme Court maintained that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed.¹

The Office Action does not provide a reason for which a person of ordinary skill in the art would have **both** the references of AAPA and Elbaz before him/her. Additionally, the objective accomplished by the combination alleged in the Office Action is not the objective of the invention recited in claim 1, but it is Elbaz objective fully accomplished therein. The objectives of the present inventive concept (i.e. claim 1) are explicitly stated on page 5, line 32 to page 6, line 8 (or see paragraphs [0030] and [0031] of the current application publication) to be effectively preventing the influences of the frame synchronization from being included in the outgoing stream during the processing of the coded stream inputted on real time, without using the phase adjustment unit which adjusts the phase difference of the transmitting-side clock and the receiving-side clock. The Office Action has provided no reason for which a person skilled in the art would reach out to Elbaz in order to accomplish this objective.

III. The Office Action fails to provide a reason that would have prompted a person of ordinary skill in the art to combine AAPA and Elbaz elements in the manner claimed.

In view of the above discussion (I+II+III), claim 1 and claims 3-5 depending from claim 1 patentably distinguish over the cited prior art references. Dependent claims 3-5 are patentable by inheriting patentable features from claim 1 and by reciting additional patentably distinguishing features. For example, there is no evidence that the cited prior art references render obvious "a clock generating unit generating a clock signal for circuit components of the data encoding/decoding apparatus wherein the clock signal from the clock generating unit is supplies to each circuit component without adjusting a phase of the clock signal based on clock reference

¹ Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. *KSR*, slip op. at 14.

information of the coded stream inputted on real time" as recited in claim 5. See the difference (3) between the prior art and the embodiment of the invention pointed out above.

NEW CLAIM 12

New claim 12 is directed to an apparatus that receives a first coded stream of a first format input and o a second coded stream of a second format or video and audio data decoded from the first coded stream in real time. The claim is supported by the originally filed specification, for example, FIG. 3 and the corresponding description in the specification. Claim 12 patentably distinguishes over the prior art by reciting:

a first data path connecting the decoder directly to the video input memory, to store the video data decoded by the decoder from the first coded stream of the first format directly in the video input memory; and

a second data path provided to connect the decoder directly to the audio input memory, to store the audio data decoded by the decoder from the first coded stream of the first format directly in the audio input memory;

wherein the first data path and the second data path are enabled when the apparatus is used to output the video and audio data received in the first coded stream of the first format as the second coded stream of the second format, the video and audio data being transferred directly from the decoder to the video input memory and the audio input memory, respectively.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 10/629,829

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Aug 27, 2008

By: LT Todor
Luminita A. Todor
Registration No. 57,639

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501